

CLAIMS

1.

1 A mold for a glassware forming machine that comprises austenitic (type D5) Ni-
2 Resist ductile iron having a magnesium content in the range of 0.01 to 0.04 wt %, a sulphur
3 content in the amount of 0.00 to 0.01 wt %, and a titanium content in the amount of 0.01 to 0.25
4 wt %.

3.6.1

2.

1 A mold for a glassware forming machine that is of austenitic Ni-Resist ductile
2 iron with a microstructure having an appreciable amount of compacted graphite and consists
3 essentially of carbon in the amount of 1.50 to 2.40 wt %, silicon in the amount of 1.00 to 2.80
4 wt %, manganese in the amount of 0.05 to 1.00 wt %, phosphorus in the amount of 0.00 to 0.08
5 wt %, nickel in the amount of 34.0 to 36.0 wt %, chromium in the amount of 0.00 to 0.10 wt %, molybdenum
6 in the amount of 0.00 to 0.80 wt %, manganese in the amount of 0.01 to 0.06 wt
7 %, sulphur in the amount of 0.00 to 0.01 wt %, titanium in the amount of 0.01 to 0.25 wt %, and
8 balance iron.

3.

1 The mold set forth in claim 2 wherein at least 40% of the graphite in said
2 microstructure is compacted graphite.

4.

1 A method of making a mold for a glassware forming machine that comprises the
2 steps of:

3 (a) casting the mold of an austenitic Type D5 Ni-Resist ductile iron according
4 to ASTM-A439-84, and

5 (b) selectively controlling thermal conductivity of the mold during said step
6 (a) by selectively controlling magnesium content of the mold in the range of 0.01 to 0.04 wt %, sulphur
7 content in the range of 0.00 to 0.01 wt %, and titanium content in the range of 0.01 to
8 0.25 wt %.